

TOBIASHAMER OHRDRUF



Dear Visitor,

The Ohrdruf steel formers warmly welcome you to Tobias Hammer.

In 1973, our enterprise took over this old, then decrepit forge from private ownership. The buildings were closed down and the production still left there was moved to other places.

When this happened, Tobias Hammer had already been a designated historic monument. Initial measures of protection had been taken. They were not sufficient, though, to document the historical importance of the facility. Thanks to considerable funds and driven even more by personal commitment and enthusiasm, a team of aficionados was formed under the sponsorship of our enterprise, whose aims was to recreate the forge and rolling mill as a museum that would bear witness to the epoch of transition from feudalism to capitalism.

The team of steel formers and, with it, the entire staff of VEB Maxhütte Unterwellenborn were bent on preserving this unique cultural monument as it embodied for them the traditions of their trade. But they also thought of Johannes R. Becher who more than once reminded the working class of its duty as the heir to the material and intellectual past of our nation and who wrote that note of caution:

"No word, no sound, no colour must get lost to us."

They had also read Johann Wolfgang von Goethe and interpreted the following words by him as an admonition to act:

> "It is not enough to know, one must also apply his knowledge. It is not enough to want, one must also do it."

To carry out the project, every department of the steel-forming factory assigned a young worker to the team that began the reconstruction effort. The shops from which the workers came made up for any loss of production occuning as a result of their absence. The reconstruction of Tobias Hammer became thus the concern of the whole enterprise.

Following initial success, it became evident that more helping hands were needed to plan and carry out the rebuilding scheme. Several go-

vernmental institutions, research establishments, colleges and technical schools, craftsmen, enterprises and artists joined the tham of steel formers and displayed admirable commitment.

The restoration of the 500-year old Tobias Hammer site was essentially completed in just 32 months of self-sacrificing labour. The final result is a historical exhibition facility in the former production shops. comprising five fully operational drop hammers, an operational rolling mill, an operational stamp mill and operational auxiliary installations such as furnaces, grinding stations, etc., as well as a small museum. The latter is housed in the former owner's villa and depicts the history of Tobias Hammer. A park and restaurant in rustic style round out the museum complex.

We hope everything here will give you pleasure and offer you an opportunity to reflect on the past, present and future development of productive forces. Our main goal is to draw your attention to the creative accomplishments of past generations, struggling to come to terms with nature. The engineering and technical results of that struggle command our greatest respect. We are committed to upholding that tradition.

Today our achievements must even be greater. Yet, we shall succeed only if we consciously build upon the accomplishments handed down to us from the past, if we make a conscious effort to assimilate the traits characteristic of technicians and workers of previous centuries, namely,

hard work, dedication and creativity.

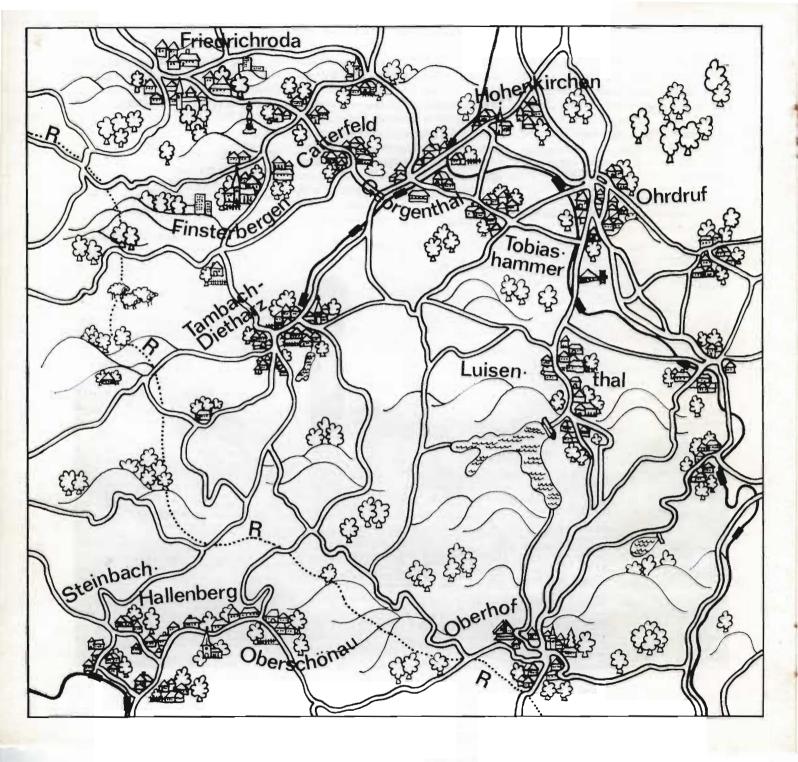
We have new, socialist conditions of production today. We are no longer forced to work 12 to 14 hours at places which are unacceptable from a public health point of view. The fruits of hard work, dedication and creativity are now reaped by all people. Our lofty goal, communism, will not be attainable without self-education and

learning. Thus, the tradition manifest in Tobias Hammer becomes a contemporary earnest of the future. This is what we, the steel formers, and all those who have assisted us believe.

We thank you for your visit and for embracing our cause.

Good luck to you.





Tobias Hammer, outside view



Forty Crafts and Mills Located on the Ohra River

They are listed below from south to north, beginning at Schwarz-wald.

1 to 19 South of the town wall

- I Ironworks at Schwarzwald
- 2 Ironworks at the Stutzhaus
- 3 Gleichen Smelter and
- 4 Schramm Copper Work, behind Gasthaus Luisenthal (inn)
- 5 Geyer Sickle Forge
- 6 Waldmühle (mill)
- 7 Sahlender Mill
- 8 Tobias Hammer
- 9 Discord or Fiedler Mill
- to Walpert Mill
- rr White Mill
- 12 Albrecht Hammer
- 13 Wire Mill
- 14 König Mill
- 15 Lapp Mill
- 16 Sickle Mill
- 17 Grinding Mill on the Weidigt Stream
- 18 Abendroth Oil Mill in the Weidigt area
- 19 Fulling Mill

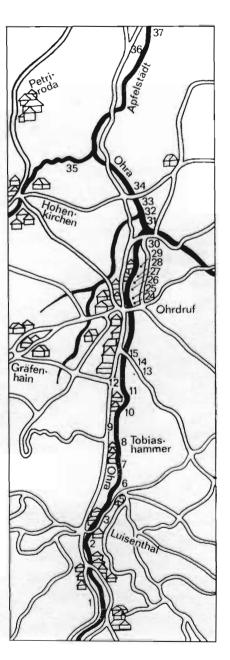
20 to 26 Within the town wall

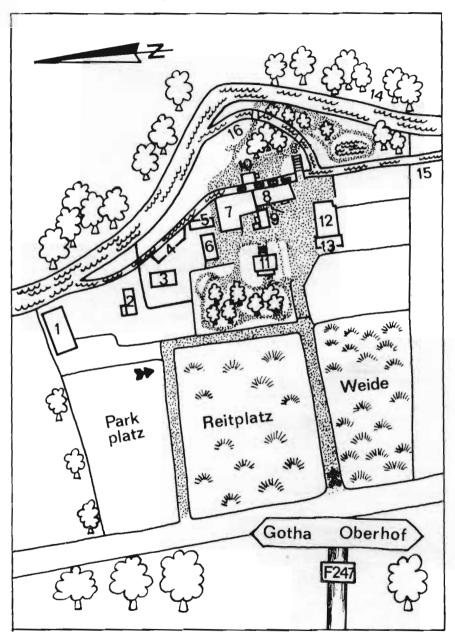
- 20 Upper Mill (bridge mill)
- 21 Brewery
- 22 Bathroom at Kirchhög
- 23 Four tanners' huts a Löberstrasse
- 24 Bathroom at the Lower Mill
- 25 Lower Mill
- 26 Flax Mill

27 to 37 North of the town wall

- 27 Grinding Mill on the Lower Pond
- 28 Oil Mill in front of Siechhof Church
- 29 Grinding Mill
- 30 Powder Mill
- 31 Second Schramm Copper Work
- 32 Paper Mill
- 33 Masse Mill
- 34 Mill at the Birnbaum Estate
- 35 Smelter Mill at the former site of a forge owned by the Fugger family
- 36 New Milll
- 37 Pohl Mill

These almost 40 mills and crafts were not directly situated on the Ohra River but on the many canals fed by it, as it is still the case today.





Ground Plan of the Tobias Hammer Site

- Barn
- 2 Stable
- 3 Pigsty
- 4 Cowshed
- 5 Garages
- Residential building
- 7 Rolling mill building
- 8 Forge building
- 9 Multipurpose building
- 10 Stamp mill
- 11 Museum
- 2 Hammerschenke (inn)
- 3 Residential building
- 14 Ohra River
- 15 Mühlgraben (mill race)
- 6 By-wash

Parkplatz = Car park

Reitplatz = Riding yard

Weide = Pasture

The Forge

General Remarks

"Tobias Hammer" was built around 1482 as an iron and sickle forge. Its name is derived from the first owner, Tobias Albrecht.

It is, however, safe to assume that this forge was also used to process copper right from the beginning, as the prior of Georgenthal Monastery had a smelter (Saigerhütte) built at Hohenkirchen near Ohrdruf back in 1462.

In 1495, this smelter was acquired and enlarged by the Fuggers, the all-powerful family of merchants from Augsburg. It processed ore from Mansfeld, from Thuringia and Hungary. A triple hammer combination was added to the existing dual hammer in 1865. To this very day, it has been employing the metal-working technique first drawn on paper and described by Agricola in the 16th century.

The products manufactured here include all types of kettles (up to a diameter of 1.5 m) used for a variety of purposes, as well as special items made to individual customer specifications.

Coppers driven in one piece used to be among the specialties of the forge. The bottom of those boilers had twice the thickness of the walls.

How Does the Forge Work?

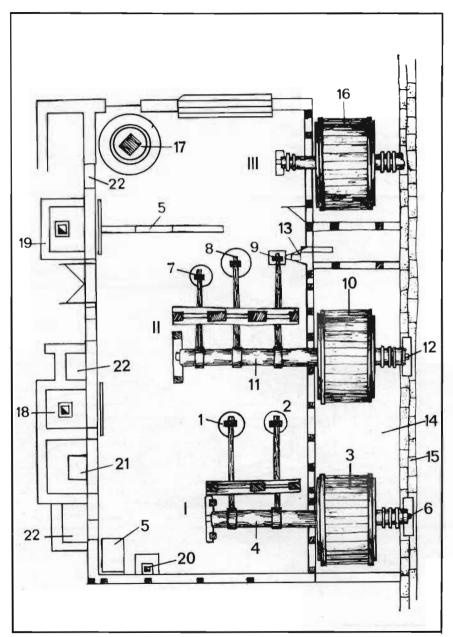
The hammers are driven by water-wheels. In order to be able to set in motion any of the five hammers, a shutter in the flume must be opened by means of a system of lever beams. The water then falls on the wheel (overshot wheel) and causes it to turn. A cam ring is wedged up on the waterwheel shaft. Through the rotational movement of the cam ring, one of the cams pushes the tail ring down to the point where the cam slides over the tail ring.

The hammer drops on the anvil by its own weight. With every cam, this sequence is repeated all over again.

The striking frequency can be controlled by the water flow.



Flat hammer ane broad hammer



GROUND PLAN OF THE HAMMER

(1) Dual hammer combination

I Broad hammer
Weight of tup 130 kg
Length of helve 3,600 mm

2 Long-head bumping hammer Weight of tup 100 kg Length of helve 3,400 mm

 3
 Waterwheel (overshot wheel)

 Diameter
 3,000 mm

 Width
 2,000 mm

 Power
 approx. 20 kW

 Number of paddles
 32

 Weight
 3,600 kg

Waterwheel shaft
Diameter approx. 1,000 mm
Length 8,550 mm
Weight approx. 3,000 kg

Bellows

6 Bearing (brass)

(11) Triple bammer combination

7 Flat hammer
Weight of tup 87 kg
Length of helve 2,550 mm

8 Broad hammer
Weight of tup 160 kg
Length of helve 3,550 mm

9 Long-head bumping hammer
Weight of tup 160 kg
Length of helve 3,300 mm

10 Waterwheel (overshot wheel) (See waterwheel of the dual combination.)

Diameter approx. 800 mm
Length 9,500 mm
Weight approx. 4,300 kg

12 Bearing

13 Adjustable support

(Continued on page 10)

Continued from page 9

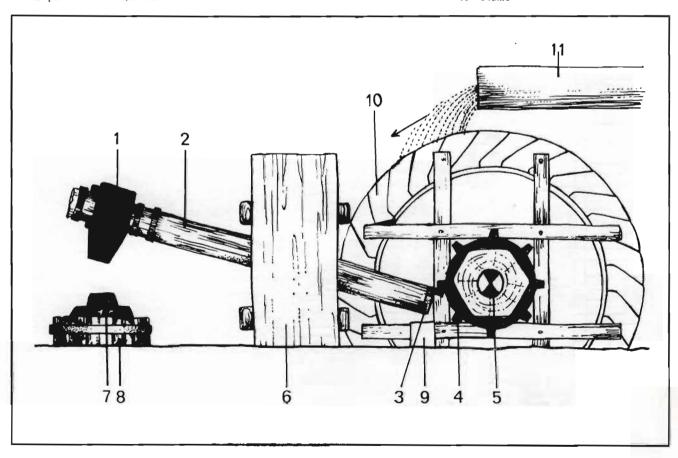
(III) Other parts of the plant

- 14 Mill race
- 15 Race wall
- 16 Waterwheel for the stamp mill
- 17 Annular furnace (2,500 mm in diameter)
- 18 Annealing furnate no. 1
 Height 600 mm
 Width 900 mm
 Depth 1,100 mm

- 19 Annealing furnace no. 2 Height 600 mm
 - Width 1,200 mm
 Depth 1,300 mm
- 20 Forge fire
- 21 Pneumatic forging hammer
- 22 Coal bunker

Drawing Showing How the Hammer Works

- Tup
- 2 Helve
- 3 Tail ring
- 4 Cam
- 5 Shaft 6 Frame
- 7 Anvil
- 8 Bed plate
- 9 Spring bracket
- 10 Waterwheel
- tr Flume



The Rolling Mill

General Remarks

The rolling mill was bought secondhand in 1850. And by 1853, it was fully assembled at he present site.

Since the industrial revolution, rolling mills have increasingly determined the metal-forming techniques employed in the production of rods and sheets. The installation of the rolling mill thus represented a modernization effort which was necessary in order to manufacture sheets and rods in the most cost-efficient way at competitive prices.

How Does the Rolling Mill Work?

A waterwheel is placed at the end of an artifical channel, called flume. When the flume is opened, the water falls on the wheel at about 1.2 m over the centre of the axle (breast wheel).

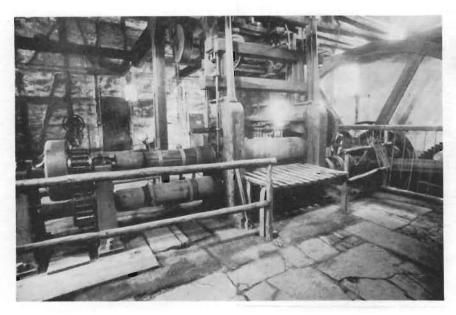
The amount of water led onto the wheel can be controlled by a system of lever beams.

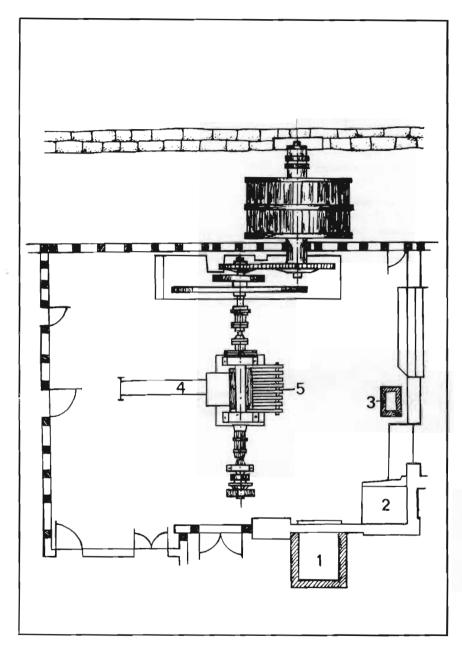
The waterwheel, in turn, drives an open set of gears, which has a transmission ratio of 1:2.13. A flywheel is fixed to the fast shaft. Its purpose is to absorb power when the system is running at noload and to supply power by transmitting its momentum when the system is operating under load.

Thus, the flywheel can deliver about 800 kilowatts for a period of 3 seconds. This power is transmitted to the lower roll via a driving spindle and a coupling box. The lower roll then drives a cogged roll mechanism, which serves to turn the upper roll in the opposite direction. The cogged roll mechanism is arranged in an unusal way. Normally, a cogged roll mechanism would be placed right behind the set of gears.

The manner in which moments are conducted into the earth is also quite special. Concrete foundations would generally be used for that purpose. Another technique, however, was found to be more economical in Thuringia at the time. Large ashlars were placed on top of each other and wired to the roll stand.

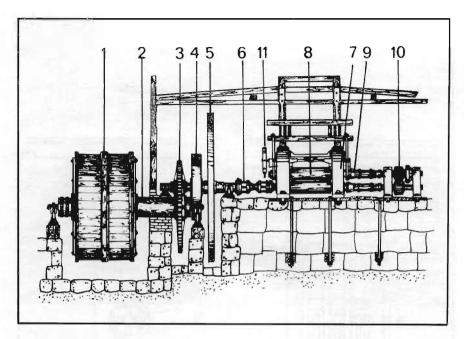
To obtain the desired roll gap (clearance between the upper and lower rolls), a system of levers supports the upper roll located over the stand in the timberwork of the rolling mill roof. A box filled with boulders, attached to the end of the lever mechanism, counterbalances the weight of the upper roll.





Ground Plan of the Rolling Mill

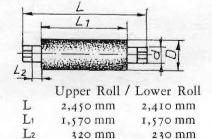
- I Sheet metal heating furnace
- 2 Annealing furnace
- 3 Quencher
- 4 Lifting table
- 5 Feeding table



Technical Data on the Rolling Mill

(1) Type of stand:
Two-high stand (single-way);
closed-top housing made of
gray cast iron
Weight approx. 4,600 kg

(2) Roll dimensions



Upper Roll / Lower Roll
D 470 mm 470 mm
d 300 mm 300 mm

Approximate weight 2,600 kg 2,500 kg

Roll material = cast steel

- (3) Waterwheel (breast wheel)
 Diameter 4,300 mm
 Width 2,000 mm
 Power approx. 36 kW
 Number of paddles 2 × 48
 Weight approx. 6,000 kg
- (4) Flywheel
 Diameter
 Weight
 7,715 kg
 Mass moment
 of inertia 35,030 kg per sq m

Design of the Plant

- 1 Waterwheel
- 2 Shaft (oak)
- 3 Gearing
- 4 Pulley
- 5 Flywheel
- 6 Coupling with driving spindle
- 7 Rolling stand
- 8 Rolls
- 9 Coupling boxes
- 10 Cogged roll mechanism
- rr Roll adjustment

5)	Gearing (open spur gears)		
	Ratio of transmission	1:2.13	
	Number of teeth		
	of gear no. 1	128	
	Number of teeth		
	of gear no. 2	60	
	Module millimetres	25.7	

- (6) Waterwheel shaft
 Diameter 600 mm
 Length 5,700 mm
 Weight 1,450 kg
- (7) Cogged roll mechanism
 (open spur gears)
 Number of teeth
 of both gears 22
 Module millimetres 25.4

Stamp Mill

General Remarks

The stamp mill is a waterwheel-driven mechanical crushing facility. Stamp mills have been known for more than 500 years.

How does the stamp mill work?

A stamp mill consists of a framework in which three wooden stamps move up and down. (The framework is approximately 3.5 m high. The cross-sectional area of the wooden stamps measures 0.2 m × 0.2 m.)

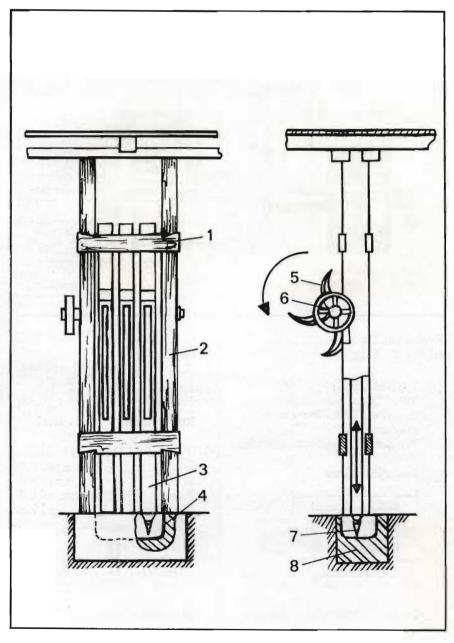
A sheet steel trough is embedded in the wooden base. The pieces to be crushed are placed in that trough. An eccentric wheel lifts up the wooden stamps, which then drop down by their own weight, crushing the material under them.

Through a wooden conduit, water is led into the through. The lighter material is washed out this way and flushed into the river.

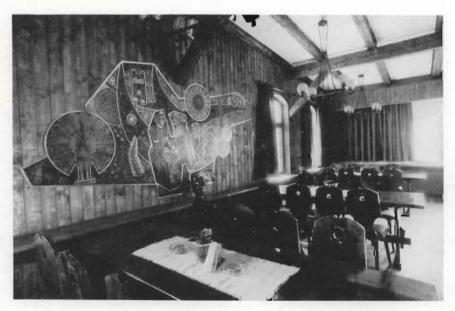
The stamp mill is driven by a waterwheel, open spur gears and a transmission installed at the turn of the 18th century.

Technical Data on the Stamp Mill

Crossbeam
 Framework
 Stamp
 Scheet metal
 trough
 Eccentric
 wheel
 Pulley
 Steel tip
 Wooden base







Place of Rest and Recreation

The spaces around the museum and between the forge and the Ohra River have been landscaped into a recreational area.

You will find there lawns, beds of roses, perennial plants and flowers, as well as brooks and ponds, and benches, all of which can be reached by pleasant walkways.

Hammerschenke (Hammer Inn), a former storage building, invites you to have a good time in a leisurely atmosphere.

We seek to combine the preservation of our national heritage with rest and recreation in the very heart of the Thuringian Forest resort region and to make your visit to Tobias Hammer an unforgettable experience.

OPENING HOURS:

Technical Monument

Open daily from 9 a.m. to 12 a.m. and from 12.30 p.m. to 4 p.m.

Restaurant and Kiosk

Hammerschenke

Open daily from 11 a.m. to 5 p.m.

Kiosk

Open Thursday – Tuesday from 10 a.m. to 6 p.m. Closed on Wednesdays.

Published by:

Stalibertonmogswerk Oligikut
A Usir of VEB Machine Unigsvellenborn
Krägefreinstrasse †
Ohrdruf, GIAR – Alon
Tolephone: 2401

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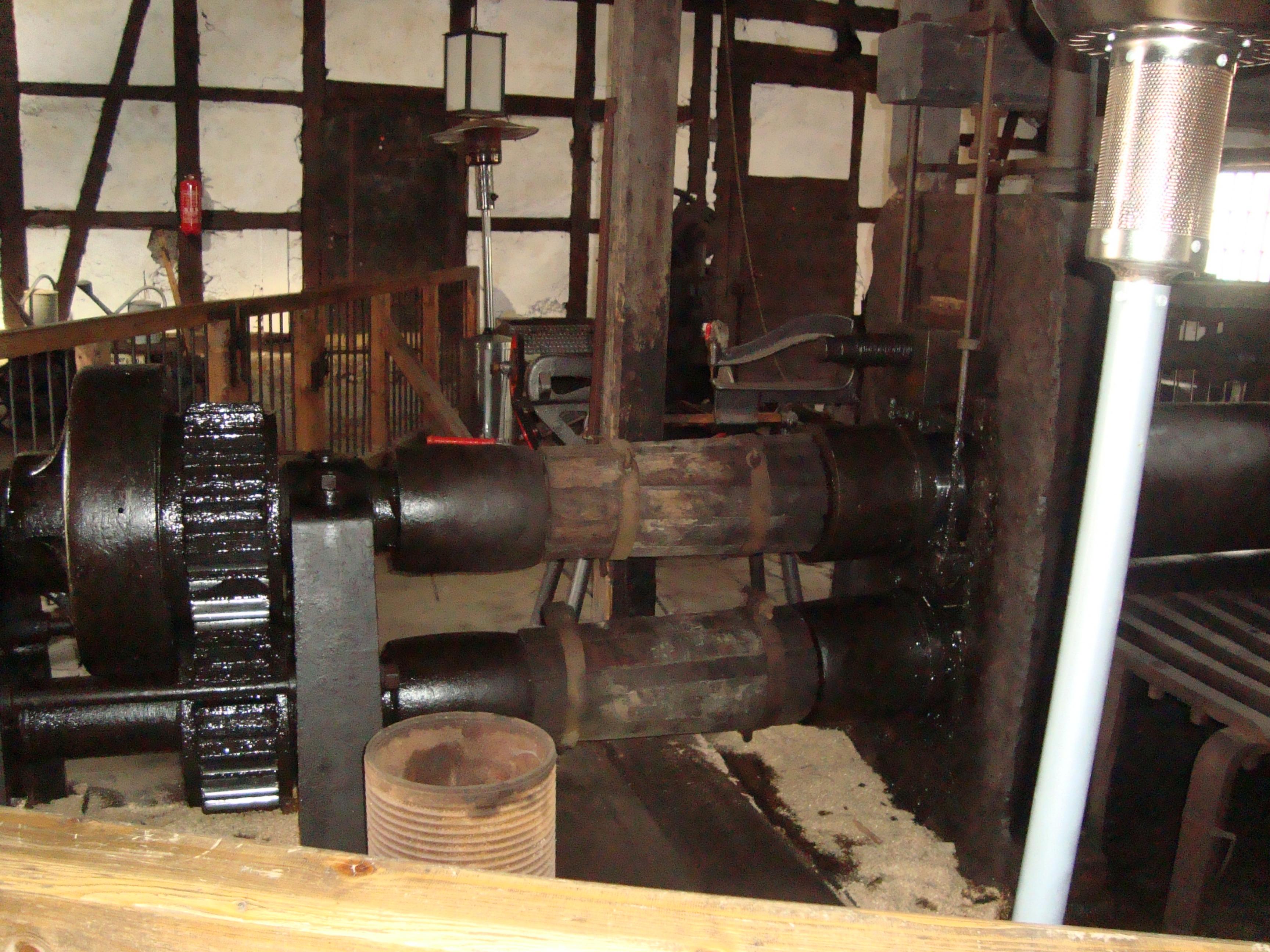
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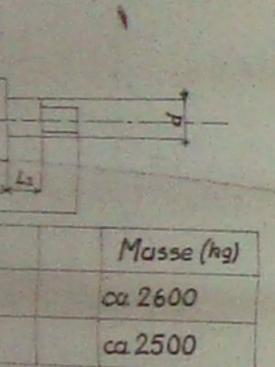




TOBIASHAMER

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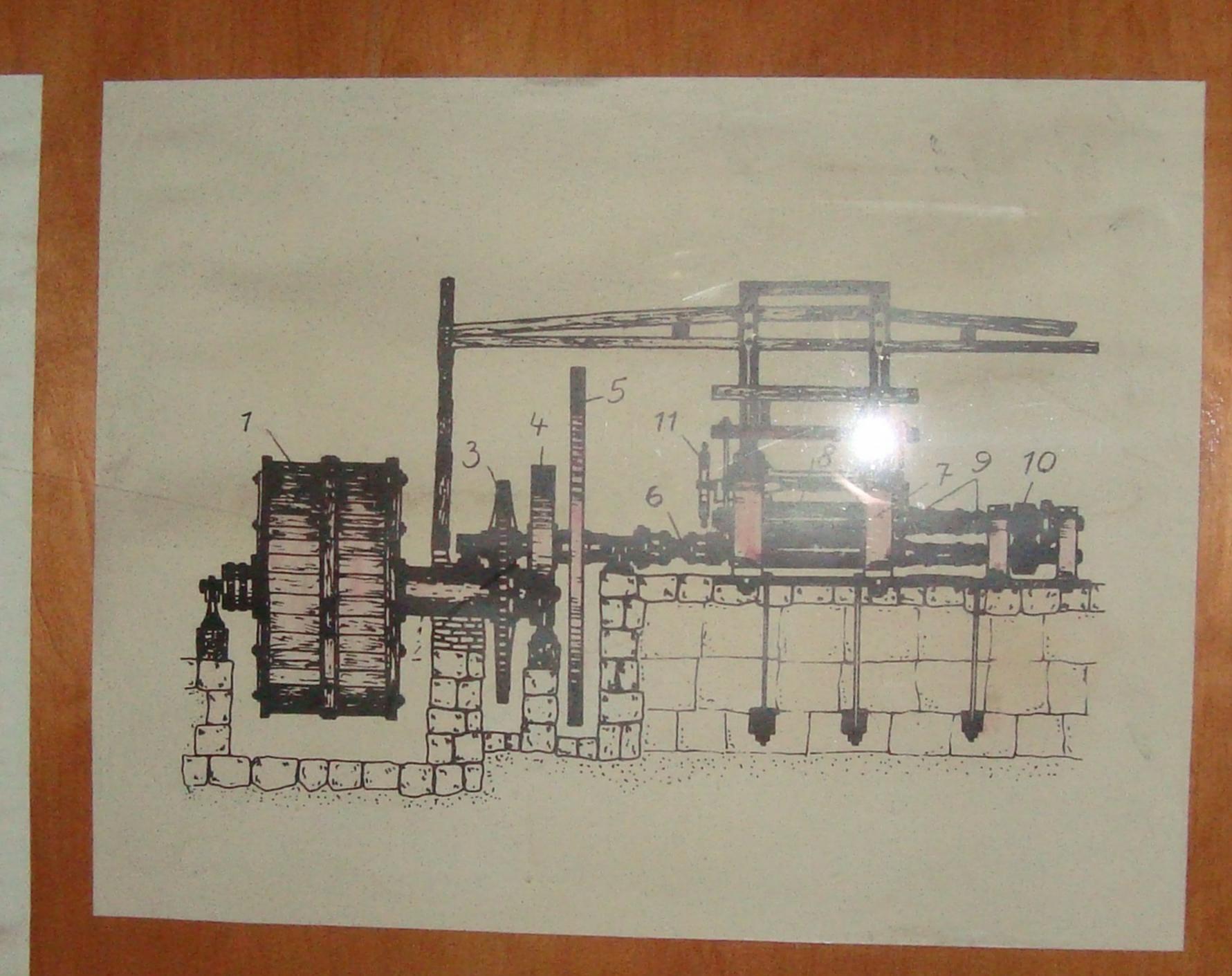
tig) 4300 mm 2000 mm 36,6 kW 1 2×48 ca. 6000 kg

5480 mm 7715 H ment 35030 kp/m²

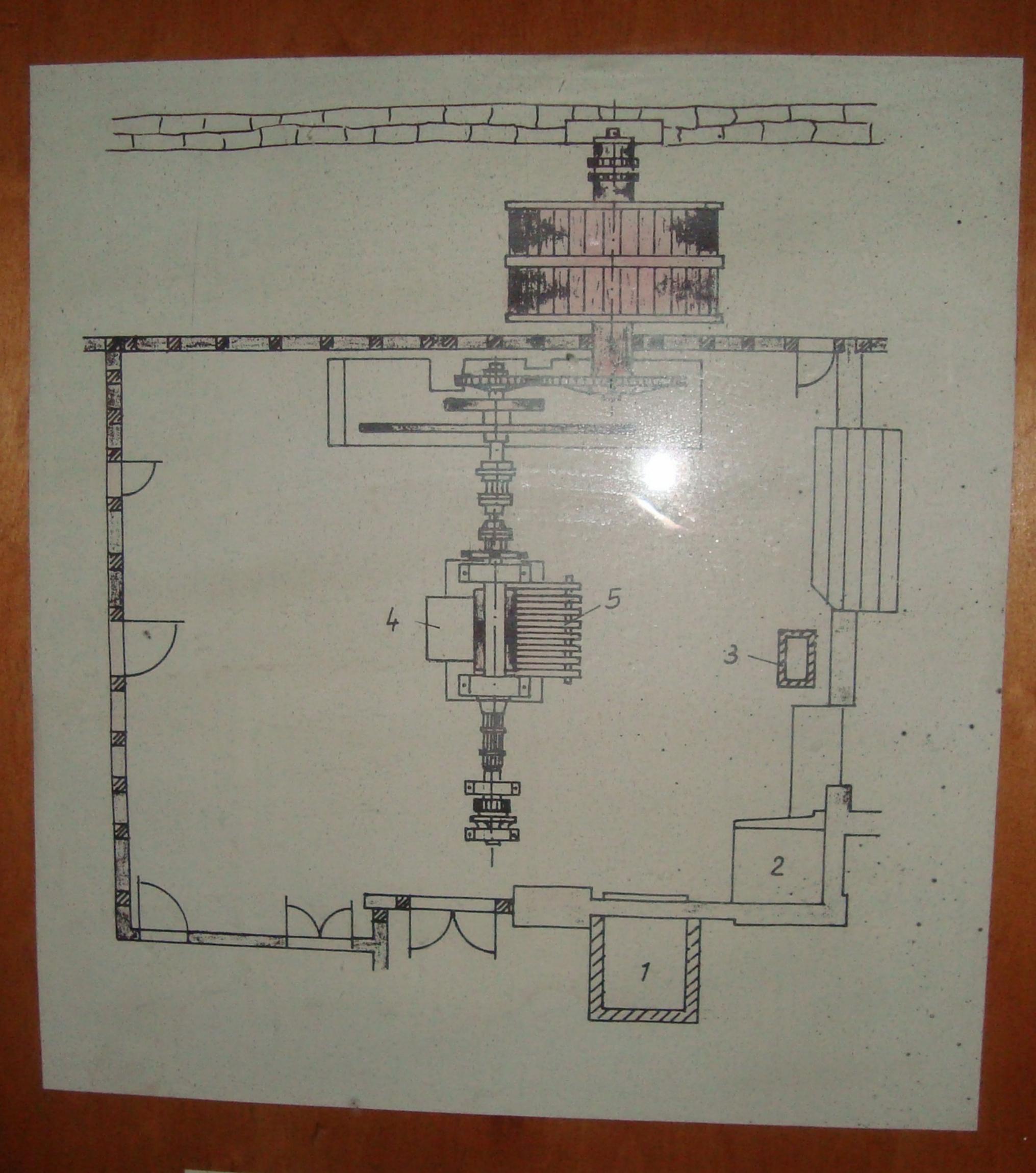
iebe Itnis 2,13 28 Rad II 60 25,7

> 600 mm 5700mm 1450kg

triebe mdI 25,4



1Wasserrad 2Welle (Eiche) 3Getriebe 4Riemenscheibe 55chwungrad 6 Kupplung mit Antriebsspindel 7Walzgerüst 8 Walzen 9 Kuppelmuffen 10 Kammwalzgetriebe 11 Walzenanstellung



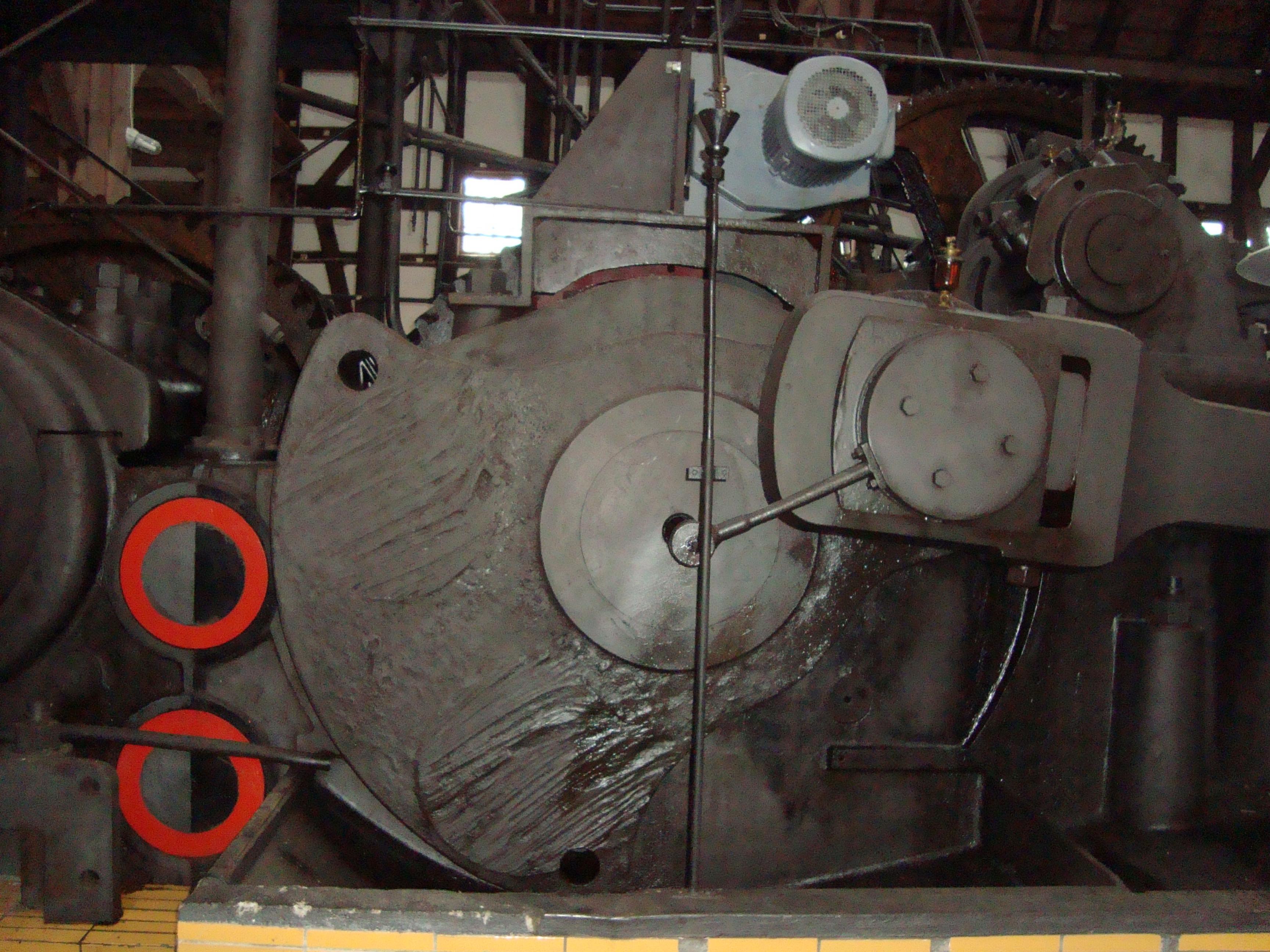
1Blechwärmeofen 2Vorplattenwärmeofen 3Abschreckbecken 4Hebetisch 5Ausfuhrtisch











HAUPTKENNDATEN DER GROSSDAMPFMASCHINE:

LEISTUNG: 12000 PS

BAUJAHR: 1920 UMBAU: 1937 - 1939

HERSTELLERFIRMA: GEBRÜDER KLEIN IN DAHLBRUCH/WESTFALEN

BAUART: 4 ZYLINDER - ZWILLING - TANDEM

REVERSIERBAR

HUBLÄNGE: 1300 MM DR€HZAHL: -130 MIN.-1 0.... 130 MIN.-1

DAMPFDRUCK: HOCHDRUCKZYLINDER 1,2 MPa

NIEDERDRUCKZYLINDER 0,2 BIS 0,5 MPa

Ø HOCHDRUCKZYLINDER: 950 MM

ANZAHL: 2 STÜCK

Ø NIEDERDRUCKZYLINDER: 1550 MM ANZAHL: 2 STÜCK

MAX. DAMPFVERBRAUCH: 30 BIS 35 to/h

ART DER DAMPFEINSTEUERUNG: KOLBENSCHIEBERSTEUERUNG

IN DIE ZYLINDER

ART DER UMSTEUERUNG: STEPHENSONSCHE KULISSE

ÜBER EXENTER

ART DER DAMPFKONDENSATION: EINSPRITZ - MISCH - KONDENSATION

MASSEN:

2 STÜCK KREUZKOPFBAHNEN a. 27,5 to 2 STÜCK NIEDERDRUCKKESSEL a. 17,0 to 2 STÜCK HOCHDRUCKKESSEL a. 14,5 to 2 STÜCK VORGELEGERAHMENECKEN a. 15,0 to ZWISCHENSTÜCK (RAHMEN) KURBELWELLE ÖLWANNE SONSTIGE ANBAUTEILE VORGELEGEWELLE	55 34 29 30 10 31 5 85 26	to to to to
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GESAMTGEWICHT CA. 305 to

DATEN DES VORGELEGEGETRIEBES:

UNTERSETZUNG 1:1 (DA STIRNRÄDER DER VORGELEGEWELLE UND DER KURBELWELLE GLEICH DIMENSIONIERT SIND)

STIRNRADABMESSUNGEN:

TEILKREISDURCHMESSER
ACHSABSTAND:
NORMALMODUL mn:
NORMALMODUL mn:
NORMALTEILUNG:
VERZAHNUNGSART:
ZAHNSCHRÄGE:
ZÄHNEZAHL:
ZAHNRAPBREITE:
KOPFDURCHMESSER:
FUSSDURCHMESSER:
ZAHNHÖHE:

2160 MM 2160 MM 30 30 = 94,25 MM PFEILVERZAHNUNG 28° 50' 63 800 MM 2220 MM 2090 MM 55 MM

DATEN DES STIRNRADGETRIEBES (KURBELWELLE - STEUERWELLE)

UERZAHNUNGSART:
UNTERSETZUNG:

1:1, DA DAS ZAHNRAD DER KURBELWELLE
UND DAS ZAHNRAD DER STEUERWELLE
GLEICH DIMENSIONIERT IST.

KOPFDURCHMESSER: 1568 MM
TEILKREISDURCHMESSER: 1536 MM
ZAHNRADBREITE: 250 MM
MODUL mn: 16
ZÄHNEZAHL: 96
ZAHNHÖHE: 34,6 MM

TECHNISCHE BESCHREIBUNG DER DAMPFMASCHINE:

DIE DAMPFMASCHINE HAT EINE LÄNGE VON 16,2 M, EINE BREITE VON 6,5 M UND EINE HÖHE VON 5,2 M.

SIE IST VON EINER SEHR ROBUSTEN BAUWEISE MIT EINER GETEILTEN STAHLFUSSRAHMENKONSTRUKTION.
DIESE MASCHINE STEHT AUF BETONFUNDAMENTEN MIT EINER MASSE VON CA. 1500 to. DIE NEUEN FUNDAMENTE HABEN NUR EINE MASSE VON 150 to.

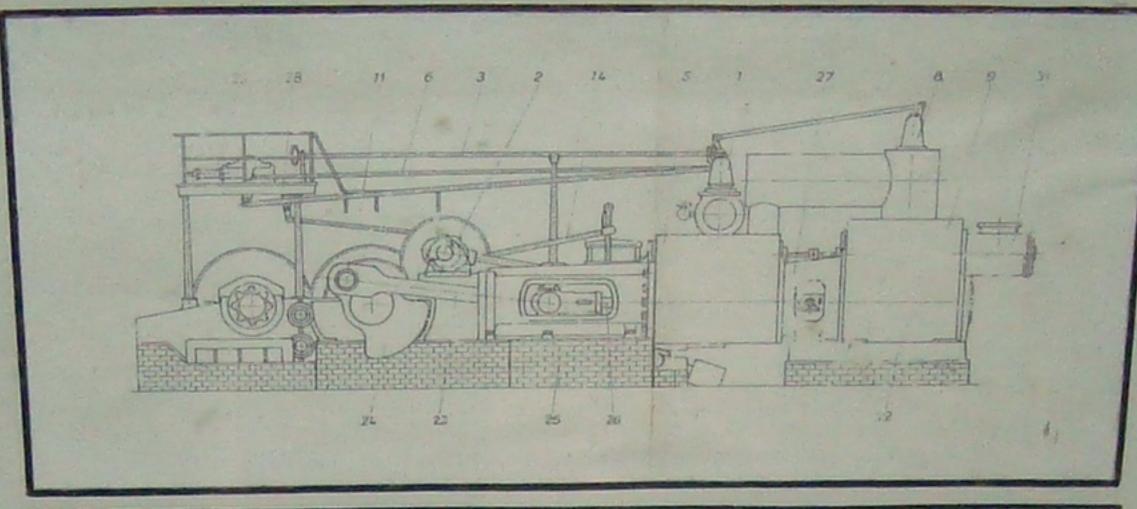
DIE MASCHINE HAT 4 ZYLINDER:
ZWEI HOCHDRUCKZYLINDER UND ZWEI NIEDERDRUCKZYLINDER,
DIE IN ZWILLINGS- UND IN TANDEMORDNUNG ANGEBRACHT WURDEN.

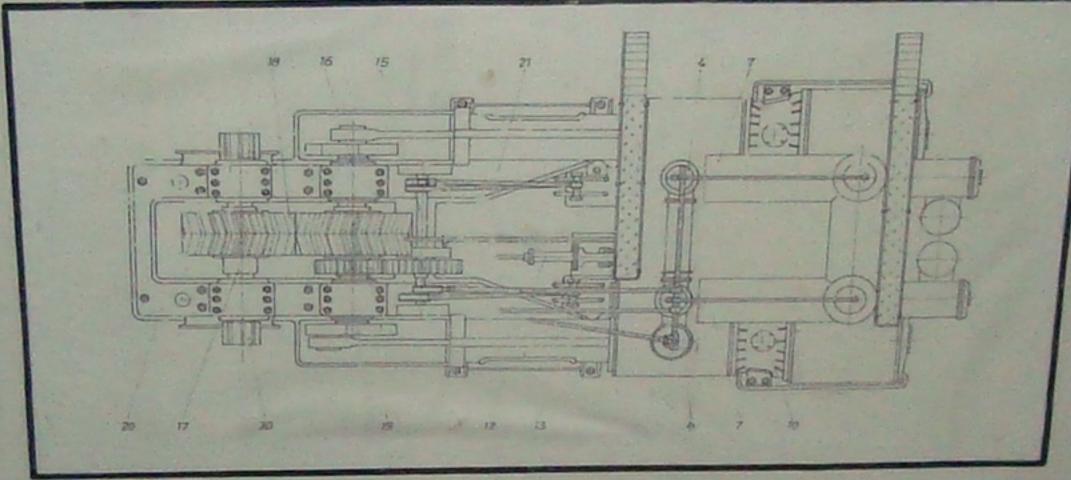
FUNKTIONSBESCHREIBUNG:

FÜR DIESE MASCHINE STANDEN URSPRÜNGLICH ALS DAMPFERZEUGER STEINMÜLLER-SCHRÄGROHRKESSEL VON 1918 MIT EINER GRUNDFLÄCHE VON 6 m x 8 m, ETWA 12 m HÖHE UND 400 m² HEIZFLÄCHE JE KESSEL ZUR VERFÜGUNG.
DIESE KESSEL HABEN EINEN GROSSEN WASSERRAUM UND WERDEN SO DEN STARK SCHWANKENDEN DAMPFBEDARF EINES WALZWERKANTRIEBES GERECHT. SIE ERZEUGEN EINEN DAMPFDRUCK VON 1,5 MPa.

VOM STEUERSTAND WIRD MITTELS HEBEL EIN HILFSDAMPFZYLINDER BETÄTIGT, DER WIEDERUM EIN VENTIL IN DER DAMPFZULEITUNG MEHR ODER WENIGER ÖFFNET. MITTELS KOLBENSCHIEBERSTEUERUNG WIRD ÜBER EXZENTER, DIE ZWANGSLÄUFIG MIT DER KURBELWELLE GEKOPPELT SIND, DIE DAMPFZUFUHR UND DIE DAMPFABLEITUNG ALLER 4 ZYLINDER AUTOMATISCH GESTEUERT. IN DEN HOCHDRUCKZYLINDER DRINGT DER DAMPF MIT 1,5 MFa EIN UND VERLÄSST DEN HOCHDRUCKZYLINDER MIT 0,2 BIS 0,5 MFa. DIESER ENTSPANNTE DAMPF TRITT UNMITTELBAR IN DEN NIEDERDRUCKZYLINDER.

HOCH - UND NIEDERDRUCKZYLINDER ARBEITEN IM TANDEM GEMEINSAM AUF EINE KOLBENSTANGE. DIE KOLBENSTANGE LENKT DIE KRAFT ÜBER EINEN KREUZKOPF AUF DIE KURBELSTANGE. DIE KURBELSTANGE SETZT ÜBER DIE KURBELWELLE DIE GERADLINIGE HIN - UND HERBEWEGUNG IN EINE DREHBEWEGUNG UM. DIE KURBELWELLE ÜBERTRÄGT ÜBER EIN PFEILVERZAHNTES ZAHNRADPAAR DIE KRAFT AUF DIE VORGELEGEWELLE. AUF DER VORGELEGEWELLE IST EINE ORTMANNKUPPLUNG ANGEBRACHT, MITTELS DER DIE FOOER TRIOSTRASSE ANGETRIEBEN WURDE. DIE UMSTEUERUNG WURDE EBENFALLS MITTELS HEBEL VOM STEUERSTAND ÜBER EINEN DAMPF-WURDE EBENFALLS MITTELS HEBEL VOM STEUERSTAND ÜBER EINEN DAMPF-HILFSZYLINDER UND MITTELS STEPHENSONSCHER KULISSE ÜBER ZWEI EXZENTER AUSGELÖST.





HAUPTFUNKTIONSTEILE DER DAMPFMASCHINE:

- 1 SCHNELLSCHLUSSABSPERRVENTIL

- 2 SCHNELLSCHLUSS 5 REGULIERUNG FRISCHDAMPFEUFUHR 4 ABSPERRVENTILE DER HOCHDRUCKZYLINDER (FAHRVENTILE)
- 5 HOCHPRUCKEYLINDER
- 6 STEUERUNG FAHRVENTILE
- DAMPFLEITUNG
- 8 STAUVENTILE DER NIEDERDRUCKZYLINDER
- (FAHRVENTILE) NIEDERDRUCKZYLINDER
- 10 ZWISCHENSTOCK 11 HEBEL ZUM UMSTEUERAPPARAT
- 12 UMSTEUERAPPARAT 13 STEPHENSONSCHE KULISSEN MIT SCHWINGE 14 EXZENTERSTANGEN 15 STEUERWELLE
- 16 KURBELWELLE

- 17 VORGELEGEWELLE
- 18 VORGELEGEGETRIEBE (STIRNRADER PFEILVERZAHNT)
- (STIRNRADER PFEILVERZAHNT)

 19 STIRNRADGETRIEBE
 (STIRNRADER GERADVERZAHNT)

 20 VORGELEGERAHMEN

 21 GRUNDRAHMEN MIT KREUZKOPFBAHNEN

 22 ZYLINDERRAHMEN

 23 KURBELSTANGE

 24 KURBELWANGEN

 25 KREUZKOPF

 26 KOLBENSTANGE

 27 SCHIEBERSTANGE

 28 STEUERBÜHNE

 29 VENTILSTEUERAPPARAT

 50 ORTMANNKUPPLUNG

 31 AUSPUFF

- 31 AUSFUFF

ZWILLINGS-TANDEM-GROSSDAMPFMASCHINE AUS DEM VEB MAXHÜTTE UNTERWELLENBORN

DIE GROSSDAMPFMASCHINE WURDE VOM VEB MAXHÜTTE 1987 ZUM TOBIASHAMMER UMGESETZT. DIESE DAMPFMASCHINE DIENTE SEIT 1939 ALS ANTRIEB EINER TRIOSTRASSE ZUR HERSTELLUNG VON TRÄGERN UND SCHIENEN.

DIE HERSTELLERFIRMA WAR DIE MASCHINENBAU-ACTIENGESELLSCHAFT, VORMALS DIE FIRMA "GEBRÜDER KLEIN" DAHLBRUCH, IM AUFTRAG DER BORSIG-WERKE IN BERLIN.

DIE BORSIG-WERKE BESTELLTEN DIESE DAMPFMASCHINE ZUM ANTRIEB IHRES SCHWEREN BLECHWALZWERKES. DURCH DEN KAUF DES BLECHWALZWERKES VON DER MITTELDEUTSCHEN STAHLWERK-AG GING AUCH DIE DAMPFMASCHINE IN ANDEREN BESITZ ÜBER. MAN ENTSCHLOSS SICH IN DIESEM BETRIEB FÜR EINEN DER DAMALIGEN MAXIMILIANHÜTTE ANGEFORDERT. MAN BOT DER MAXIMILIANHÜTTE ANGEFORDERT. MAN BOT DER MAXIMILIANHÜTTE EINEN NEUEN ANTRIEB IN 3 VARIANTEN AN:

VARIANTE 1 - NEUBAU EINER DAMPFMASCHINE BAUZEIT: 15 BIS 16 MONATE PREIS: 270000 REICHSMARK

VARIANTE 2 - UMBAU DER VORHANDENEN DAMPFMASCHINE FÜR EINEN DIREKTEN ANFRIEB BAUZEIT: 10 BIS 11 MONATE PREIS: 130000 REICHSMARK

VARIANTES - UMBAU DER VORHANDENEN DAMPFMASCHINE DURCH EINBAU EINES NEUEN ZAHNRÄDERGELEGES BAUZEIT: ETWA 8 MONATE PREIS: 48000 REICHSMARK

1937 WURDE DIESE DAMPFMASCHINE VON DER DAMALIGEN MAXIMILIANHÜTTE UNTERWELLENBORN ZUR VERBESSERUNG DER LEISTUNGSFÄHIGKEIT DER TRIOSTRASSE MIT VERÄNDERTEM VORGELEGE NACH VARIANTE 3 ANGEKAUFT.

DAS URSPRÜNGLICHE UNTERSETZUNGSVERHÄLTNIS DES VORGELEGES BETRUG 1:2,27,

NACH DEM UMBAU BETRUG DAS UNTERSETZUNGSVERHÄLTNIS 1:1.

AM 23.03.1939 WURDE DIE DAMPFMASCHINE (WALZENZUGMASCHINE) DER 700 ER

TRIOSTRASSE DER MAXIMILIANHÜTTE UNTERWELLENBORN IN BETRIEB GENOMMEN

UND WAR BIS 09. APRIL 1945 IN BETRIEB.

NACHDEM DIE PRODUKTION WIEDER AUFGENOMMEN.

STRASSEN EUROPAS, IM VEB MAXHÜTTE AUFGENOMMEN.

DIE TRIOSTRASSE DIE PRODUKTION EINSTELLEN



